



WESTERN REGIONAL ENVIRONMENTAL OFFICE

U.S. Army Environmental Center

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Standard Federal Regions 8, 9 and 10

STAYING ON THE CUTTING EDGE OF ENERGY CONSERVATION

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Cultural Communications



FROM THE EDITOR



Jerry Owens
Chief, WREO

The Western Regional Environmental Office became aware of resources in the Department of Energy (DOE) National Renewable Energy Laboratory (NREL) offices after hearing a presentation by the DOE regional director at a National Defense Industrial Association conference. After looking at their excellent Web sites, we learned these organizations have many mature programs providing information, research and support in the areas of energy and environmental management, health, outreach, environmental management systems and sustainability.



Geothermal energy, Soda Lake, NV

WESTERN REGIONAL ENVIRONMENTAL OFFICE VISITS NATIONAL RENEWABLE ENERGY LABORATORY (NREL)

The DOE Denver Regional Office has developed programs in six broad categories, which include:

✱ Building Technology, State and Community Programs

The Building Codes Assistance Team is a partnership effort of the Office of Codes and Standards and six regional support offices, with assistance and support from the Pacific Northwest National Laboratory. The Home Energy Rating Systems office establishes rating systems to help home builders market energy-efficient homes, help consumers make improved home buying and renovation

decisions, and allow lenders to provide mortgage incentives for energy-efficient housing. Rebuild America is a network of community partnerships that saves money by saving energy. Rebuild America partnerships, working with DOE, improve the energy efficiency of com-



NREL's Solar Energy Research Facility (SERF), Golden, CO

mercial and multifamily residential buildings. This program provides core funding to the states to enable them to maintain a state energy office and to undertake state-specific energy conservation projects. The Weatherization Assistance Program provides financial assistance to local agencies through the states and territories for the weatherization of low-income households.

✱ Federal Energy Management Program

The Federal Energy Management Program mission is to reduce the energy cost to government by advancing energy efficiency, water conservation, and the use of solar and other renewable energy.

✱ Industrial Technologies Programs

The Industrial Technologies Program provides funding to state and industry partnerships for innovative projects that develop and demonstrate advances in energy efficiency and environmentally clean production.

✱ Power Technologies Programs

The Geothermal Heat Pump Program creates a solid market for geothermal heat pumps that is not dependent on utility or government incentives. This consortium is a collaborative effort between DOE, EPA, over 70 utilities, equipment manufacturers, and other public and private organizations. The

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Commander, USAEC **COL James M. De Paz**
Deputy Commander **Dr. Kenneth Juris**
Chief, WREO **Gerald F. Owens**
Chief of Staff **LTC James A. Price**
Chief of Public Affairs **Robert DiMichele**

Western Regional Biomass Energy Program mission is to develop and promote the commercial adoption of biomass energy technologies in partnership with industry and the states in accordance with an approved strategy for energy, environmental, and economic benefits to the region.

✱ **Transportation Technologies Programs**

The Clean Cities Program establishes agreements between the federal government, municipalities, local fleet operators, and fuel suppliers to deploy alternative fuel vehicles. DOE provides technical assistance and ensures that federal fleet purchases contribute to each city's goals for putting alternative vehicles on the road.

✱ **Other Programs**

The Commercialization Ventures Program provides financial assistance to state

energy offices in teaming arrangements with private sector organizations. The purpose is to accelerate commercialization of emerging renewable energy technologies. The Community Partnerships team, since its inception in 1996, has been working with communities to enhance sustainable community development activities. This team seeks out proactive community leaders interested in sustainable

"smart growth," and establishes successful implementation partnerships. The Indian Energy Resource Development Program promotes tribal energy self-sufficiency and fosters employment and economic development on America's Indian reservations. Million Solar Roofs seeks to place one million solar energy systems on United States roofs by the year 2010. This initiative will use existing grants to

help communities, businesses, governments and utilities increase solar energy systems sales. One key feature involves the use of solar systems in federal buildings. Wind Powering America is a commitment to dramatically increase the use of wind energy in the United States.

DOE and NREL Web sites www.doe.gov and www.nrel.gov provide a reference to installation energy and environmental staff for programs, assistance, and support of local needs and programs.



Low-sulfur diesel fuels

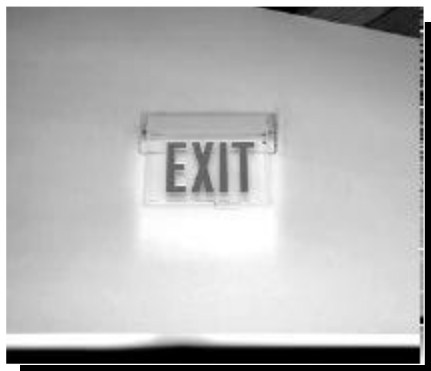
ENERGY STAR INSTITUTIONAL PURCHASING Key to Reducing Utility Consumption

Curt Williams

Contributing Editor

The changing times of installation and facility transitioning present new challenges to energy managers in coping with modifications to existing facilities, accommodating new construction and renovation, meeting the demands of expanded installation missions, and still satisfying prescribed energy consumption baselines and goals. Major installation utility upgrades and modernizations over past years still continue to be productive and worthwhile investments. Additionally, advanced installation-wide energy awareness programs, coupled

with strong command emphasis and senior-level leadership support from the top down, prove to be invaluable in meeting energy goals and reducing utility consumption. However, more fine-tuning is still required to continue minimizing and reducing utility energy consumption.



Exit lights with two watts of power

Today, "Energy Star," formulated by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE), offers organizations new avenues and approaches to consider by purchasing specifically designated energy-efficient products to aid in redlining energy costs and preventing air pollution. Energy Star Institutional Purchasing has been designed to assist installations in fine-tuning the Federal Energy Management Program (FEMP) recommended products. These products (now totaling over 11,000) in 11 major categories of usage bear the Energy Star label. Primary areas within this assistance program include:

- ✱ Appliances
- ✱ Exit Signs
- ✱ Office Equipment
- ✱ Traffic Lights
- ✱ Water Coolers
- ✱ Heating and Cooling Equipment
- ✱ Consumer Electronics
- ✱ Lighting
- ✱ Roof Products
- ✱ Transformers
- ✱ Windows

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ENHANCING AMERICAN INDIAN CULTURAL COMMUNICATIONS

Curt Williams
Contributing Editor

Army Policy

Army policy emphasizes tribal sovereignty and government-to-government relationships between the Army and federally recognized tribes. It also encourages early consultation and



(From left to right) MG Edmond Boenisch (The Adjutant General for WY-National Guard), COL Larry Bartlett (Chief of Staff, WY-National Guard), and Jim Van Ness (General Counsel-OSD), discuss American Indian cultural communication issues during an executive overview of the workshop in Cheyenne, WY.

interaction with tribal organizations before and during program and project planning, development and implementation. Installations, bases and facilities are encouraged to build relationships with tribes to understand the relevant culture long before potential issues need to be resolved. Army policy regarding Native American resources is contained in AR 200-4,

and Army guidance for policy implementation is contained in DA PAM 200-4. The HQDA Office of the Director of Environmental Programs point of contact for Native American Affairs is Mr. Lee Foster, (703) 693-0675.

What Has Been Done to Help Partnering and Enhance Communications?

The Army continually strives to further enhance communication with tribal government representatives through conferences, compliance activities, and special educational workshops and courses. One course in particular has proven to be especially valuable and informative in discussing ways to establish and improve communications and build partnerships regarding American Indian and Alaska Native (AI/AN) cultural resources. This course is "American Indian Cultural Communications Workshop." The course has previously been taught at four locations during FY 2000, three during FY 2001 and two in FY 2002. Fort Sill, OK will host the next course, Oct. 22-25, 2002. Interested attendees for future courses may contact Donata Renfrow at donata@mindspring.com, (678) 357-6513 for additional information. Note that these workshops tend to fill up quickly.

Most Recent Course

The Wyoming National Guard hosted the most recent course in Cheyenne, in July 2002. A cross-section of representatives of the Army and Native Americans attended, and they addressed a wide variety of important subjects. One

key issue, which was strongly emphasized for maintaining communications and building solid partnerships, is developing the "right team mix of players." AI/AN cultural communication is not solely a function of the local environmental office, but rather requires the involvement of the entire garrison staff at an installation to work on issues with the tribes concerned. This philosophy parallels DoD's commitment and policy to ensure federally recognized tribes "receive timely notice and a meaningful opportunity to be heard before any DoD component takes an action that may significantly affect protected tribal resources, tribal legal rights, or tribal lands." Additionally, a special two-hour executive session was presented concurrently, targeted for commanders and senior level managers within the area, to aid in establishing sensitivity and insight about understanding and building relationships with neighboring tribal communities.

Who Should Be Players in the Partnership?

It is crucial to put together the right team composition to build a successful partnership with AI tribes. In addition to the environmental office at the local installation, base or facility, and the installation and garrison commanders, others can include legal counsel; military police; Plans, Training and Operations; Contracting; and Range Control. Each has significant roles and responsibilities that can contribute to building a successful partnership between the installation and AI/AN tribes. Also key are other agency players from non-DoD agencies such as the National Parks Service, the U.S. Fish & Wildlife Service, the Bureau of Indian Affairs and the Tribal Historical Preservation Officer (THPO). The THPOs are officially designated by a federally recognized Indian tribe to direct a program approved by the NPS and must have assumed some or all of the functions of the State Historical Preservation Officers (SHPOs) on tribal lands. The National Association of THPOs, www.nathop.org, (202) 628-8476, provides specific information depicting points of contact by state and by tribe, and requiring consultation and coordination in the decision-making process to work through issues successfully.



The summer Powwow circuit draws dancers from across the states.

Course Contents

The three-and-a-half-day workshop is continually upgraded and enhanced to help staff at facilities understand the prescribed DoD policies with respect to AI/AN and how to implement it at their respective sites. American Indians and DoD personnel teach the course, with added material presented by American Indian panelists.

The following is a list of prime course topic areas to aid in successful AI/AN consultations, planning and problem solving.

- ✱ Explanation of the cornerstones of AI/AN law
- ✱ Explanation of how these principles affect our relationships with AI/AN
- ✱ Description and discussion of the cultural complexities encountered when working in Indian country
- ✱ Description and discussion of the variations in communication styles that affect working together
- ✱ Detailed discussions of the consultation process and how to begin
- ✱ Examples of how DoD partnerships are currently working
- ✱ Examples and strategies for precluding and/or minimizing and managing conflict
- ✱ Discussion of contracting/surplus issues that concern tribal governments and Alaska Native villages

Lessons Learned from Past Experiences

1. **Personal backgrounds.** Preconceived notions of Indian culture, lack of understanding and misinformation can be cumbersome mental baggage, which can hinder the effectiveness with which we respond to tribal interactions.

2. **Cultural Training.** Emphasis cannot be placed enough on the importance of obtaining "cultural training" for the entire team of installation players who will be involved with tribal issues. Equally important is interacting with the particular tribe or tribes involved in the project and developing a sense of understanding of tribal infrastructure, political leaders, obstacles, goals, and the people themselves. This aids in demonstration of the installation's sincere desire to establish a solid foundation to support future working relationships.

3. **Allow for Indian Time.** Give your undivided attention to tribal members, especially elders, and develop the patience and respect to allow them the time to speak and respond on "their time" without interruption. Most importantly, listen until they are finished speaking.



A Powwow participant during the singing of the American Indians' Veteran Song

4. **Discard Preconceived Notions.** Do not prejudge the professionalism or level of competence that tribal officials or elders have on the basis of their clothing or the manner in which they live. There is a potential hidden wealth of information and background understanding to be gained by allowing oneself to set aside "personal baggage." Take the time to get to know the community. Participate or observe community events. Read and learn about that tribe's religious beliefs, history, politics and infrastructure, and subscribe to the community newspaper.



Veteran's Intertribal Association Color Guard

5. **Establish Relationships.** Long before a project or program surfaces, develop and establish relationships to be long-term, not only with tribal officials, but also with the tribal people, to foster trust, faith and sense of sincerity. Success has been experienced by establishing an installation "800" number for tribal representatives to call, when a name and personality has been identified who will answer such a call. This offers the particular tribe a means to notify the DoD facility of an event that the tribe desires them to avoid, report a noise complaint, or open a question.

6. **Be Innovative.** Just because a process has always been accomplished a given way does not guarantee it will work with an AI/AN tribal interaction. E-mail, postal mail, faxes and meeting presentations have proven to be ineffective. One-on-one discussions and site visits to the tribal community have been shown to improve community involvement and increase levels of approach and solutions that work best for the particular circumstance.

7. **Establish Roles and Protocols.** Although the actual elected tribal officials may have the best of intentions and may desire to deal with you directly, they are dealing with much larger daily issues regarding child care, medical and mental health care, housing and education. Therefore it is imperative to appoint a liaison within the tribe to have the official authority to assist the installation in gathering information and disseminating it to elected tribal officials.

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FREE COMPREHENSIVE ENERGY AUDITS FOR FEDERAL FACILITIES

Curt Williams
Contributing Editor

The Department of Energy (DOE), through the Federal Energy Management Program (FEMP), has sponsored free facility and building energy audits over the past eight years. Many federal agencies, including DoD facilities, bases and installations, have already taken advantage of this service and other specialized areas of expertise. This assistance is generally available at no cost to the client, subject to DOE total annual program funding limits. The purpose is to aid federal facilities in identifying new initiatives, designs, innovative conservation measures, and purchasing of energy efficient products and equipment to minimize annual utility consumption levels and maximize efficiencies.

In addition to energy audits described above, two other types of assessments can be provided throughout the year, depending on the DOE budget. The first type of assessment pertains to load and energy reduction techniques focusing on short-term measurement and analysis of facility systems to identify controls, changes, and other possibilities to quickly reduce peak demand. The second type of assessment addresses industrial processes related to facilities, such as water and wastewater treatment plants. FEMP has enlisted the services of another DOE program through the University Industrial Assessment Centers (one is at Colorado State University) that are available to provide these assessments for federal facilities.

To learn more about the multitude of DOE programs and how they may apply to you, the following Web sites have been made available:

<http://www.eren.doe.gov/femp> (FEMP home page)

<http://www.eren.doe.gov/dro/>

<http://www.sustainable.doe.gov/>

<http://www.eren.doe.gov/femp/procurement>

Installations interested in being considered for future energy audits are invited to coordinate directly with the DOE regional office FEMP team point of contact within your respective area:

- For installations within the states of CO, MT, WY, SD, ND, and UT, contact Mr. Randy Jones, Golden, CO (303) 275-4814, e-mail: randy_jones@ee.doe.gov.
- For installations within the states of AZ, CA, OR, ID, WA, NV, AK, and HI, contact Mr. Arun Jhaveri, Seattle, WA (206) 553-2152, e-mail: run.jhaveri@hq.doe.gov.

For information on the 2003 energy community's annual event, visit www.energy2003.ee.gov/ for specific details as they develop.

ENERGY STAR INSTITUTIONAL PURCHASING

(Continued from page 3)

To further assist energy managers in meeting the demands of mission expansions (ranging from target systems support to new or renovated transient quarters, to new computer systems), an Energy Star Purchasing Tool Kit has been designed to help installation purchasers, contract buyers and facility designers to quickly and easily identify, specify and procure Energy Star-labeled and FEMP-recommended products. This tool kit, available online, includes a host of valuable resources:

- ✱ Product specifications
- ✱ Savings/Life-cycle cost calculators that reflect how much energy and funds an organization may save, prior to the actual purchase
- ✱ Drop-in procurement language that installation buyers and designers can incorporate into respective policies, requests and contract specifications to help guarantee that the right combination of equipment and fixtures is obtained
- ✱ Example of energy-efficient purchasing legislation, including federal executive orders, state and local government policies, sample request for proposal, and contracts
- ✱ Communication materials for installations and facilities to promote their success to stakeholders, including handouts
- ✱ Additional resources, other organizations to contact, current publications and other saving opportunities.

To learn more about how to use the tools in this program, the following Web site has been established to help you in managing your current and future utility energy needs: <http://www.epa.gov/nrgystar/purchasing//index.html>.



Light shelves with day lighting

Distributed Energy Resource Workshops for Federal Facilities

Curt Williams
Contributing Editor

The Federal Energy Management Program (FEMP) has been conducting a series of hands-on projects focused on Distributed Energy Resource (DER) workshops across the country this year. Registration for Boston, MA and Los Angeles, CA are still open for Oct. 23 -25, 2002 and Spring 2003, respectively. The previous workshops were well attended, averaging approximately 120 interested personnel per location.

FEMP's DER workshops offer opportunities for federal facility energy managers interested in applying DER technologies to meet and work with private industry representatives interested in supporting DER projects with financing and/or equipment. Other key participants for DER success include environmental regulators and utility companies. DER technologies include any decentralized energy storage, reciprocating engines, solar power photovoltaics, and combined heat and power (CHP) systems. The workshops focus on providing information, resources and contacts that allow participants to identify where DER technologies may be cost-effective in supporting agency and activity missions, and to help initiate sound DER project development.

Who Should Attend?

Representatives from federal, state and regional organizations involved in

energy management, coordination and procurement; private and public sector and federal facilities energy and environmental organizations and activities; and regulatory, financing, legal and energy service organizations are encouraged to participate. The workshops will be particularly relevant for any federal representative who wants to explore DER opportunities with potential partners and experienced colleagues. The workshops highlight new FEMP resources to support agencies in assessing DER costs, benefits and opportunities, such as the screening available for CHP applications.

What Will the Workshops Include?

- ✱ DER Technologies and Systems
- ✱ DER and Energy Security
- ✱ Resources to Develop DER Projects
- ✱ Financing DER Projects
- ✱ Case Studies and Testimonials
- ✱ Getting DER Projects Started

Boston Workshop

On Oct. 23-25, 2002, FEMP is offering the DER Federal Facilities Workshop in conjunction with the



*Rotor turbines for windpower,
Golden, CO*

annual Combined Heat and Power Roadmap workshop.

Los Angeles Workshop

The Western Regional DER workshop is scheduled for Spring 2003. The specific dates are to be announced.

For more information, visit www.eren.doe.gov/femp/techassist/der_resources.html. You may also contact Shawn Herrera of FEMP at (202) 586-1511 for more details. If you are interested in receiving a free copy of the FEMP periodical publication *Focus*, e-mail Annie.Haskins@ee.doe.gov. The 2003 FEMP Training Catalog listing available courses is now available by calling 1-800-363-3732.



Photovoltaic hybrid power equipment, Lake Powell, UT

ENHANCING AMERICAN INDIAN CULTURAL COMMUNICATIONS

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Other Sources to Consult

The following list is not intended to be inclusive, but offers some additional sources of information to tap into, to aid in the overall process of partnering with tribes and developing sound working relationships to address future issues and enhance communications.

1. U.S. Army Environmental Center (USAEC) Web site: <http://aec.army.mil>. The Conservation/Cultural Resource Management portion of this site offers accessible online fact sheets and summary reports to assist in management of Native American cultural resources.
2. DA PAM 200-4 (Oct. 1, 1998) Appendix E offers a sample template of a NAGPRA Comprehensive Agreement regarding the inadvertent discovery and excavation of Native American cultural items, and Appendix F – Guidelines for Army Consultation with Native Americans. This PAM is also accessible through the USAEC Web site as cited above.
3. National Association of Tribal Historic Preservation Officers (THPOs) Web site: <http://www.nathpo.org>. This site currently offers background information of the organization and a complete U.S. map displaying tribal contacts by state and tribe to aid future partnering. The site is currently undergoing extensive expansion to address education and training opportunities, federal agencies, sacred sites, projects and partnerships, and other items of interest. This will serve as an even more useful reference source in the future.

USAEC-WREO Will Publish Your Environmental Articles and Ideas in Our Newsletters

The Western Regional Environmental Office (WREO) of the U.S. Army Environmental Center (USAEC) is always looking for good news or success stories from your environmental and energy programs. These may be published in our WREO quarterly newsletters, the USAEC *Environmental Update* and other media available to us for promotion. We serve you and other Army and DoD activities in your region by supporting the DoD/Army mission through coordination, communication and facilitation of regional issues and activities. The WREO *Environmental Newsletter* alerts and educates Army personnel and other DoD activities and organizations within Regions 8, 9 and 10 on important and relevant issues. Articles include innovative technologies, methods of successful management, partnering sessions, success stories, lessons learned and upcoming events. The newsletter also informs federal, state and local regulators, and special interest groups about the Army and DoD positive presence. Additionally, the newsletters are provided to active major Army commands (MACOMS), the U.S. Army Reserve Command and Support Commands, Army National Guard Bureau and Army Corps of Engineers as well as various environmental staffs at Army Headquarters. If you have a news story or idea that you would like published in our newsletter, please contact our editor, Curt Williams at cwilliam@rma.army.mil (Comm. (303) 844-0952). We can publish your pre-written articles or help write and develop new ones from your information and ideas to cross-share your success. Thank you for considering using the WREO newsletter as a means to share and reach out to others.



U.S. Army Environmental Center
Western Regional Environmental Office
U.S. Custom House, Room 427
721 19th Street
Denver, CO 80202-2500